



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,821	12/13/2003	James C. Bellows	2003P13762US	2215
7590	06/29/2004		EXAMINER	
Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/734,821	BELLOWS, JAMES C.
	Examiner Ivars C. Cintins	Art Unit 1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

The disclosure is objected to because of the following informalities: Figs. 1 and 2 appear to show prior art deep bed and powdered resin polishers, respectively (see paragraph 0001, last two lines; paragraph 0003, line 1; paragraph 0006, line 1; and paragraphs 0012 and 0013 of the specification); and if this is so, then they must be labeled as such, in accordance with M.P.E.P. § 608.02(g).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 3,849,306) in view of Applicant's admitted prior art. Anderson discloses a condensate water purification system comprising a bed of cation exchange resin 12, a bed of anion exchange resin 16 and a bed of cation exchange resin 19. Accordingly, this primary reference discloses the claimed invention with the exception of the type of resin (i.e. deep bed or powdered) in each bed. Applicant has admitted (see paragraphs 0001-0006 and 0019 of the specification) that deep bed and powdered resins having the recited characteristics are known. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ these admittedly known resins in system of Andersen, since these resins are commercially available, and are capable of producing the same functions as the resins of this primary reference. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the relative amount of powdered resin to deep bed resin recited in claim 13 in the system of the modified primary reference, in order to obtain a

corresponding amount of cation and anion removal capability for this modified primary reference system.

Claims 1-10 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Applicant's admitted prior art, as applied above, further in view of Faylor et al. (U.S. Patent No. 3,870,033) or Casolo (U.S. Patent No. 3,985,648). The modified primary reference discloses the claimed invention with the exception of the downstream mixed bed polisher. Faylor et al. and Casolo each teach providing a mixed bed polisher downstream from single ion type exchange resin beds (see Fig. 2, elements 52, 54 and 56 of Faylor et al.; and Fig. 1, elements 24, 28, 32, 36 and 40 of Casolo). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Anderson, as modified by Applicant's admitted prior art, with a mixed bed polisher located downstream from bed 19, as suggested by either Faylor et al. or Casolo, in order to capture any residual contaminant ions that may remain in the effluent from this bed 19. Again, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the admittedly known resins in system of the modified primary reference, since these resins are commercially available, and are capable of producing the same functions as the resins of this modified primary reference. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the relative amounts of resins recited in claims 3, 4, 6 and 16-18 in the system of the modified primary reference, in order to obtain a corresponding amount of cation and anion removal capability for this modified primary reference system.

Crits (U.S. Patent No. 3,537,989) shows a similar process for demineralizing water with a combination of single ion type exchange resin beds and mixed resin beds.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ivars Cintins*  
Ivars C. Cintins  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
June 26, 2004